

## First task:-

I can provide you with some general suggestions to improve page load speed and development based on common best practices:

**Optimize Images:** Compress and resize images to reduce their file sizes without compromising quality. Use modern image formats like WebP, and consider lazy loading images that are below the fold to prioritize the loading of visible content.

**Minify CSS and JavaScript:** Minify CSS and JavaScript files to remove unnecessary characters, spaces, and comments, which will reduce file sizes and improve download times.

**Leverage Browser Caching:** Enable caching headers to allow the browser to store static resources, such as images, CSS, and JavaScript files, in its cache. This will help returning visitors load the website faster by retrieving these files from the cache instead of downloading them again.

**Enable Gzip Compression:** Configure the server to enable Gzip compression, which will reduce the size of files before they are sent to the browser. This can significantly improve download times.

**Reduce Server Response Time:** Optimize server-side code, database queries, and infrastructure to minimize the time it takes for the server to respond to requests. Implement caching mechanisms, database optimizations, and consider using a content delivery network (CDN) to serve static files from edge servers closer to the users.

**Minimize HTTP Requests:** Reduce the number of HTTP requests by combining and minifying CSS and JavaScript files. Consider using CSS sprites to combine

small images into a single file and reducing the number of individual image requests.

**Optimize Above-the-Fold Content:** Prioritize loading and rendering of above-the-fold content to ensure users see the most important parts of the page quickly. Load critical CSS and JavaScript required for rendering this content as early as possible.

**Eliminate Render-Blocking Resources:** Identify and optimize any CSS or JavaScript resources that block the rendering of the page. Defer non-critical scripts or load them asynchronously to allow the browser to render the page faster.

## Second Task:-

When analyzing the given website (<https://www.ecoleglobale.com/>) for potential technical improvements follow following step:-

Compress and resize the images on the website to reduce their file size without compromising quality.

Minify the CSS and JavaScript files to remove unnecessary characters, spaces, and comments. This can significantly reduce the file sizes and improve load times. Make sure to create backup files before making any modifications.

Enable caching headers for static resources such as images, CSS, and JavaScript files. This will allow returning visitors to load these resources from their browser cache, reducing server requests and improving load speed.

Implement Gzip compression on the server to compress files before they are sent to the user's browser. This can reduce the size of HTML, CSS, and JavaScript files, resulting in faster downloads.

Reduce the number of HTTP requests by combining multiple CSS and JavaScript files into one, respectively. Minify these combined files to remove unnecessary characters. Fewer requests and smaller file sizes can improve page load speed.

Review the usage of third-party scripts and plugins on the website. They can significantly impact page load speed, so consider removing or replacing them with more efficient alternatives where possible.

**Optimize Above-the-Fold Content:** Prioritize the loading of above-the-fold content to ensure

users see important information quickly. Make sure critical resources like CSS and JavaScript required for rendering this content are loaded early.